Please amend claims 1, 3, 6, and 7 as follow:

1. (currently amended) An optical margin testing system for an automatic power control loop comprising:

an optical circuit including a laser diode and a monitor diode coupled to said automatic power control loop;

a bias generator circuit for generating a control signal; said control signal applied to said automatic power control loop; ~~and~~

said control signal enabling an operation point of said laser diode to both increase and decrease by a set percentage value; and

said bias generator circuit for generating said control signal including a tri-state receiver; a single input applied to said tri-state receiver, said single input having a selected value of zero, high impedance, or one.

2. (canceled)

3. (currently amended) An optical margin testing system for an automatic power control loop ~~as recited in claim 2 wherein~~ comprising:

an optical circuit including a laser diode and a monitor diode coupled to said automatic power control loop;

a bias generator circuit for generating a control signal; said control signal applied to said automatic power control loop; said bias generator circuit for generating said control signal including a tri-state receiver;

said control signal enabling an operation point of said laser diode to both increase and decrease by a set percentage value; and

said tri-state receiver ~~receives~~ receiving an input signal; said input signal ~~is~~ being applied to said tri-state receiver for selecting one of a normal operational mode, an increased set percentage value operational mode, and a decreased set percentage value operational mode.

4. (original) An optical margin testing system for an automatic power control loop as recited in claim 3 wherein said bias generator circuit for generating said control signal includes a current mirror coupled to said tri-state receiver.

5. (original) An optical margin testing system for an automatic power control loop as recited in claim 4 wherein said current mirror provides said control signal applied to said automatic power control loop.

6. (currently amended) An optical margin testing system for an automatic power control loop as recited in claim ~~1~~ 3 wherein said automatic power control loop applies a bias current to said laser diode responsive to said control signal.

7. (currently amended) An optical margin testing system for an automatic power control loop as recited in claim ~~1~~ 3 wherein said monitor diode coupled to said automatic power control loop provides a feedback current to said automatic power control loop.

8. (original) An optical margin testing system for an automatic power control loop as recited in claim 4 wherein said bias generator circuit for generating said control signal includes an input current generating circuit coupled to said current mirror.

9. (original) An optical margin testing system for an automatic power control loop as recited in claim 8 wherein said input current generating circuit includes a

variable resistor having a value represented by R_{APC}; said variable resistor reflecting a voltage reference value V_{REF} for generating an input current applied to said current mirror.

10. (original) An optical margin testing system for an automatic power control loop as recited in claim 9 wherein said input current applied to said current mirror is substantially equal to V_{REF} / R_{APC}.

11. (original) An optical margin testing system for an automatic power control loop as recited in claim 9 wherein said input current generating circuit includes an operational amplifier coupled to said variable resistor and wherein said voltage reference value V_{REF} is applied to said operational amplifier.

12. (original) An optical margin testing system for an automatic power control loop comprising:

an optical circuit including a laser diode and a monitor diode coupled to said automatic power control loop;

a tri-state receiver;

a current mirror coupled to said tri-state receiver for generating a control signal; said control signal applied to said automatic power control loop; said control signal enabling an operation point of said laser diode to both increase and decrease by a set percentage value; and

an input signal being applied to said tri-state receiver for selecting one of a normal operational mode, an increased set percentage value operational mode, and a decreased set percentage value operational mode;

13. (original) An optical margin testing system for an automatic power control loop as recited in claim 12 wherein said automatic power control loop applies a bias current to said laser diode responsive to said control signal.

14. (original) An optical margin testing system for an automatic power control loop as recited in claim 12 wherein said monitor diode coupled to said automatic power control loop provides a feedback current to said automatic power control loop responsive to said control signal.

15. (original) An optical margin testing system for an automatic power control loop as recited in claim 12 includes an input current generating circuit coupled to said current mirror.

16. (original) An optical margin testing system for an automatic power control loop as recited in claim 15 wherein said input current generating circuit coupled to said current mirror includes a variable resistor having a value represented by R_{APC}; said variable resistor reflecting a voltage reference value V_{REF} for generating an input current applied to said current mirror.

17. (original) An optical margin testing system for an automatic power control loop as recited in claim 16 wherein said input current applied to said current mirror is substantially equal to V_{REF} / R_{APC}.

18. (original) An optical margin testing system for an automatic power control loop as recited in claim 16 wherein said input current generating circuit includes an operational amplifier coupled to said variable resistor and wherein said voltage reference value V_{REF} is applied to said operational amplifier.